

Please amend the claims as follows and add claims 58-63:

34.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

selecting a two-sided adhesive tape having at least one adhesive, wherein the adhesive tape has a low lamination temperature [selected from the group consisting essentially of pressure sensitive adhesives, thermoplastic adhesives, and thermoset adhesives];

affixing a first side of the two-sided adhesive tape to a surface of the organic support structure; and

affixing a face of the semiconductor die to a second side of the adhesive tape.

35.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a two-sided adhesive tape to a surface of the organic support structure, wherein the adhesive tape [comprises a pressure sensitive adhesive] is a hybrid material including a first material having a high glass transition temperature and a second material having a low glass transition temperature; and

affixing a face of the semiconductor die to a second side of the adhesive tape.

36.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a two-sided adhesive tape to a surface of the organic support structure, wherein the adhesive tape [comprises a thermoset adhesive] is a hybrid material including thermoplastic and thermoset material, and the thermoset component has a glass transition temperature of approximately 30 degrees C; and

affixing a face of the semiconductor die to a second side of the adhesive tape.

37.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a two-sided adhesive tape to a surface of the organic support structure, wherein the adhesive tape [comprises a thermoplastic adhesive] has a lamination

temperature of less than or equal to approximately 100 degrees C; and

affixing a face of the semiconductor die to a second side of the adhesive tape.

38.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a ~~(two-sided adhesive tape)~~ to a surface of the organic support structure ~~(each side of the tape having an adhesive layer,)~~ wherein the adhesive tape [comprises a pressure sensitive, thermoset adhesive] has a lamination temperature of less than or equal to approximately 100 degrees C, each adhesive layer having a thickness of .0005 inches, and the carrier layer having a thickness of .002 inches; and

affixing a face of the semiconductor die to a second side of the adhesive tape.

39.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a two-sided adhesive tape to a surface of the organic support structure, wherein the adhesive tape ~~comprises a pressure sensitive, thermoset adhesive;~~ <sup>is a</sup>

~~(elevating the temperature)~~ to 100 degrees C (to activate) the first side of the adhesive tape;

applying pressure to the tape and organic support structure to laminate the adhesive tape to the organic support structure;

affixing a face of the semiconductor die to a second side of the adhesive tape;

elevating the temperature of the tape to activate the second side of the adhesive tape; and

applying pressure to the die and organic support structure to laminate the adhesive tape to the die.

44.) (Amended) A method of attaching a semiconductor die to an organic support structure, comprising:

affixing a first side of a two-sided adhesive tape to a surface of the organic support structure, wherein the adhesive tape ~~comprises a pressure sensitive, thermoset adhesive;~~ <sup>is a</sup>

~~(elevating the temperature)~~ of the tape ~~(to activate)~~ the first side of the adhesive tape;

applying pressure to the tape and organic support structure to laminate the adhesive tape

to the organic support structure, wherein elevating the temperature and applying pressure occurs for 100ms;

affixing a face of the semiconductor die to a second side of the adhesive tape;  
elevating the temperature of the tape to activate the second side of the adhesive tape;  
applying pressure to the die and organic support structure to laminate the adhesive tape to the die;

wire bonding bond wires to a plurality of bond pads on the die face with a plurality of lead connections on the organic support structure;

applying an encapsulating material over the bond pads, bond wires, lead connections, and a portion of the die face and support structure.

51.) (Amended) A method for fabricating a semiconductor package comprising:

providing a semiconductor die having a face and a plurality of bond pads;

providing an organic support structure comprising a die attach area and a plurality of lead connections;

providing a two-sided adhesive tape intermediate the die and the organic support structure to bond the die thereto, wherein the adhesive tape has a lamination temperature of about ambient temperature; and

attaching a first side of the adhesive tape to the die attach area of the organic support structure and a second side of the adhesive tape to the die face.

52.) (Amended) The method of claim 51 further comprising applying low heat to laminate the tape to the die and the organic support structure.

58.) (New) The method of claim 34 further comprising applying pressure and 100 degrees C to the tape for 100ms and laminating the tape to the support structure.

59.) (New) The method of claim 34 further comprising laminating the tape to the organic support structure at ambient temperature.

SUPPLEMENTAL PRELIMINARY AMENDMENT

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60.) (New) The method of claim 34 further comprising laminating the tape to the organic support structure at 100 degrees C or less.

61.) (New) The method of claim 34 wherein the adhesive tape comprises Carboxyl Terminated Acrylonitrile Butadiene modified epoxy resin.

62.) (New) The method of claim 34 wherein the adhesive tape comprises Carboxyl Terminated Acrylonitrile Butadiene modified epoxy resin formed into layers approximately .0005 inches in thickness.

63.) (New) The method of claim 34 wherein the adhesive tape has a lamination temperature of less than or equal to approximately 100 degrees C, each adhesive layer having a thickness of .0005 inches, and the carrier layer having a thickness of .002 inches.

Currently claims 34-63 are pending in the application. The Examiner is invited to contact Applicant's Representatives at the below-listed telephone number if there are any questions regarding this Supplemental Preliminary Amendment or if prosecution of this application may be assisted thereby.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 19 day of April, 2001.

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